

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously presented) A semiconductor device comprising:

a transparent conductive film and a plurality of thin film transistors having a semiconductor thin film over a substrate having an insulating surface; and

an electrode or a wiring formed by stacking a first conductive layer in contact with the semiconductor thin film and a second conductive layer on the first conductive layer;

wherein the first conductive layer has a larger width than the second conductive layer, and

wherein the transparent conductive film is on a part of the first conductive layer extending from an end portion of the second conductive layer.

2. (Previously presented) A semiconductor device comprising:

a transparent conductive film and a plurality of thin film transistors having a semiconductor thin film over a substrate having an insulating surface; and

an electrode or a wiring formed by stacking a first conductive layer in contact with the semiconductor thin film and a second conductive layer on the first conductive layer;

wherein the first conductive layer has a portion projected from an end portion of the second conductive layer, and

wherein the transparent conductive film is on the portion of the first conductive layer projected from the end portion of the second conductive layer.

3 (Previously presented). A semiconductor device comprising:

a transparent conductive film and a plurality of thin film transistors having a semiconductor thin film over a substrate having an insulating surface; and

an electrode or a wiring formed by stacking a first conductive layer in contact with the semiconductor thin film and a second conductive layer on the first conductive layer;

wherein a side surface portion of the first conductive layer has a smaller tapered angle than a side surface portion of the second conductive layer, and

wherein the transparent conductive film is on the side surface portion of the first conductive layer.

4 (Previously presented). A semiconductor device comprising:

a transparent conductive film and a plurality of thin film transistors having a semiconductor thin film over a substrate having an insulating surface; and

an electrode or a wiring formed by stacking a first conductive layer in contact with the semiconductor thin film and a second conductive layer on the first conductive layer;

wherein a side surface portion of the first conductive layer has a larger tapered angle than a side surface portion of the second conductive layer, and

wherein the transparent conductive film is on the side surface portion of the first conductive layer.

5 (Previously presented). A semiconductor device comprising:

a transparent conductive film and a plurality of thin film transistors having a semiconductor thin film over a substrate having an insulating surface; and

an electrode or a wiring formed by stacking a first conductive layer in contact with the

semiconductor thin film and a second conductive layer on the first conductive layer;

wherein a side surface portion of the first conductive layer and the second conductive layer have a same tapered angle, and

wherein the transparent conductive film is on the side surface portion of the first conductive layer.

6 (Previously presented). A semiconductor device comprising:

a transparent conductive film and a plurality of thin film transistors having a semiconductor thin film over a substrate having an insulating surface;

an electrode or a wiring formed by stacking a first conductive layer in contact with the semiconductor thin film and a second conductive layer on the first conductive layer; and

a flattening insulating film over a part of the electrode or a part of the wiring;

wherein the transparent conductive film is provided over the flattening insulating film,

wherein the first conductive layer has a portion projected from an end portion of the second conductive layer,

wherein the electrode or the wiring is in contact with the transparent conductive film through a contact hole provided in the flattening insulating film, and

wherein an end portion of the electrode or an end portion of the wiring is located within the contact hole.

7 (Previously presented). The semiconductor device according to any one of Claims 1 to 6,

wherein the first conductive layer is formed with titanium, molybdenum, alloy containing titanium, or alloy containing molybdenum.

8 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, wherein the second conductive layer is formed with aluminum or alloy containing aluminum.

9 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, further comprising:

a light-emitting element in which the transparent conductive film serves as an anode or a cathode.

10 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, further comprising:

a liquid crystal element in which the transparent conductive film serves as a pixel electrode.

11 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, wherein the transparent conductive film is formed with ITO or IZO.

12 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, wherein a surface of the second conductive layer is covered with an oxide film.

13 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, wherein the first conductive layer and the second conductive layer are formed continuously in a same sputtering apparatus.

14 (Previously presented). The semiconductor device according to any one of Claims 1 to 6, wherein the semiconductor device is a mobile information terminal, a video camera, a digital camera, or a personal computer.

15. (Previously presented) The semiconductor device according to any one of Claims 1 to 6, further comprising:

a flattening insulating layer including a contact hole over the semiconductor thin film; wherein the electrode or the wiring is formed over the flattening insulating layer and is in contact with the semiconductor thin film through the contact hole.

16. (Currently Amended) A semiconductor device comprising:

a thin film transistor over a substrate, the thin film transistor comprising a semiconductor thin film, a gate electrode comprising a first conductive layer and a second conductive layer;

an insulating film over the thin film transistor;

a third conductive layer over the insulating film, the third conductive layer being in contact with the semiconductor thin film;

a fourth conductive layer on the third conductive layer; and

a transparent conductive film over the insulating film,

wherein the first conductive layer has a first tapered angle and the second conductive layer has a second tapered angle,

wherein the first tapered angle is different from the second tapered angle,

wherein the third conductive layer has a larger width than the fourth conductive layer,

wherein the transparent conductive film is in contact with a part of the third conductive layer

extending from an end portion of the fourth conductive layer,
wherein the third conductive layer comprises titanium or molybdenum,
wherein the fourth conductive layer comprises aluminum, and
wherein the ~~[[third]]~~ fourth conductive layer is not in contact with the transparent conductive film.

17. (Currently Amended) A semiconductor device comprising:
a thin film transistor over a substrate, the thin film transistor comprising a semiconductor thin film, a gate electrode comprising a first conductive layer and a second conductive layer;
an insulating film over the thin film transistor;
a third conductive layer over the insulating film, the third conductive layer being in contact with the semiconductor thin film;
a fourth conductive layer on the third conductive layer; and
a transparent conductive film over the insulating film,
wherein the first conductive layer has a first tapered angle and the second conductive layer has a second tapered angle,
wherein the first tapered angle is different from the second tapered angle,
wherein the third conductive layer has a portion projected from an end portion of the fourth conductive layer,
wherein the transparent conductive film is in contact with the portion of the third conductive layer projected from the end portion of the fourth conductive layer,
wherein the third conductive layer comprises titanium or molybdenum,
wherein the fourth conductive layer comprises aluminum, and

wherein the ~~[[third]]~~ fourth conductive layer is not in contact with the transparent conductive film.

18. (Currently Amended) A semiconductor device comprising:

a thin film transistor over a substrate, the thin film transistor comprising a semiconductor thin film, a gate electrode comprising a first conductive layer and a second conductive layer;

an insulating film over the thin film transistor;

a third conductive layer over the insulating film, the third conductive layer being in contact with the semiconductor thin film;

a fourth conductive layer on the third conductive layer; and

a transparent conductive film over the insulating film,

wherein the first conductive layer has a first tapered angle and the second conductive layer has a second tapered angle,

wherein the first tapered angle is different from the second tapered angle,

wherein a side surface portion of the third conductive layer has a smaller tapered angle than a side surface portion of the fourth conductive layer,

wherein the transparent conductive film is in contact with the side surface portion of the third conductive layer,

wherein the third conductive layer comprises titanium or molybdenum,

wherein the fourth conductive layer comprises aluminum, and

wherein the ~~[[third]]~~ fourth conductive layer is not in contact with the transparent conductive film.

19. (Currently Amended) A semiconductor device comprising:

a thin film transistor over a substrate, the thin film transistor comprising a semiconductor thin film, a gate electrode comprising a first conductive layer and a second conductive layer;

an insulating film over the thin film transistor;

a third conductive layer over the insulating film, the third conductive layer being in contact with the semiconductor thin film;

a fourth conductive layer on the third conductive layer; and

a transparent conductive film over the insulating film,

wherein the first conductive layer has a first tapered angle and the second conductive layer has a second tapered angle,

wherein the first tapered angle is different from the second tapered angle,

wherein a side surface portion of the third conductive layer has a larger tapered angle than a side surface portion of the fourth conductive layer,

wherein the transparent conductive film is in contact with the side surface portion of the third conductive layer,

wherein the third conductive layer comprises titanium or molybdenum,

wherein the fourth conductive layer comprises aluminum, and

wherein the ~~[[third]]~~ fourth conductive layer is not in contact with the transparent conductive film.

20. (Currently Amended) A semiconductor device comprising:

a thin film transistor over a substrate, the thin film transistor comprising a semiconductor thin film, a gate electrode comprising a first conductive layer and a second conductive layer;

an insulating film over the thin film transistor;
a third conductive layer over the insulating film, the third conductive layer being in contact with the semiconductor thin film;
a fourth conductive layer on the third conductive layer; and
a transparent conductive film over the insulating film,
wherein the first conductive layer has a first tapered angle and the second conductive layer has a second tapered angle,
wherein the first tapered angle is different from the second tapered angle,
wherein a side surface portion of the third conductive layer and the fourth conductive layer have a same tapered angle,
wherein the transparent conductive film is in contact with the side surface portion of the third conductive layer,
wherein the third conductive layer comprises titanium or molybdenum,
wherein the fourth conductive layer comprises aluminum, and
wherein the ~~[[third]]~~ fourth conductive layer is not in contact with the transparent conductive film.

21. (Currently Amended) A semiconductor device comprising:
a thin film transistor over a substrate, the thin film transistor comprising a semiconductor thin film, a gate electrode comprising a first conductive layer and a second conductive layer;
an insulating film over the thin film transistor;
a third conductive layer over the insulating film, the third conductive layer being in contact with the semiconductor thin film;

a fourth conductive layer on the third conductive layer;
a transparent conductive film over the insulating film; and
a flattening insulating film over the fourth conductive layer and the transparent conductive film;

wherein the first conductive layer has a first tapered angle and the second conductive layer has a second tapered angle,

wherein the first tapered angle is different from the second tapered angle,

wherein the transparent conductive film is provided over the flattening insulating film,

wherein the third conductive layer has a portion projected from an end portion of the fourth conductive layer,

wherein the third conductive layer is in contact with the transparent conductive film through a contact hole provided in the flattening insulating film,

wherein an end portion of the third conductive layer is located within the contact hole,

wherein the third conductive layer comprises titanium or molybdenum,

wherein the fourth conductive layer comprises aluminum, and

wherein the ~~[[third]]~~ fourth conductive layer is not in contact with the transparent conductive film.

22. (Previously Presented) The semiconductor device according to any one of Claims 16 to 21, further comprising:

a light-emitting element in which the transparent conductive film serves as an anode or a cathode.

23. (Previously Presented) The semiconductor device according to any one of Claims 16 to 21, further comprising:

a liquid crystal element in which the transparent conductive film serves as a pixel electrode.

24. (Previously Presented) The semiconductor device according to any one of Claims 16 to 21,

wherein the transparent conductive film is formed with ITO or IZO.

25. (Previously Presented) The semiconductor device according to any one of Claims 16 to 21,

wherein a surface of the fourth conductive layer is covered with an oxide film.

26. (Previously Presented) The semiconductor device according to any one of Claims 16 to 21,

wherein the third conductive layer and the fourth conductive layer are formed continuously in a same sputtering apparatus.

27. (Previously Presented) The semiconductor device according to any one of Claims 16 to 21,

wherein the semiconductor device is a mobile information terminal, a video camera, a digital camera, or a personal computer.

28. (Previously Presented) The semiconductor device according to any one of Claims 16 to

21, further comprising:

a flattening insulating layer including a contact hole over the semiconductor thin film;
wherein the third conductive layer is formed over the flattening insulating layer and is in contact with the semiconductor thin film through the contact hole.